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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,429	06/24/2003	Sridhar Sadasivan	01333	9648

7590 09/08/2004  
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EXAMINER

CLEVELAND, MICHAEL B

ART UNIT PAPER NUMBER

1762

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,429	SADASIVAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael Cleveland	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 22-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 36-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>062403</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-21 and 36-41 in the reply filed on 6/28/2004 is acknowledged. The traversal is on the ground(s) that no serious burden would be placed on the examiner. This is not found persuasive because a serious burden exists in the differing issues likely to arise during the prosecution of the different classes of invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 22-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/28/2004.

### ***Specification/Drawings***

3. The disclosure is objected to because of the following informalities: Figs. 7B and 8A are not listed in the Brief Description of the Drawings. The serial numbers on p. 1 must be supplied, and the attorney docket numbers must be removed.

Appropriate correction is required.

### ***Information Disclosure Statement***

4. The information disclosure statement filed 6/24/2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. No copy of WO 02/45868 is present in the file.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-9, 11, 13-21, and 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jagannathan et al. (U.S. Patent 6,471,327, hereafter '327) in view of Miyashita et al. (U.S. Patent Application Publication 2001/0001050, hereafter '050).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 1, 13, 14, 38-41: '327 teaches a method for forming a layer of an electroluminescent (EL) material (col. 4, lines 3-14) comprising the steps of:

providing a substrate (14);

controllably depositing an organic material (col. 9, lines 48-55) over the substrate in a first location and a distinct second location (to form a patterned high resolution image (col. 1, lines 19-32; Fig. 3D), the mixture being contained under a first condition and a distinct second condition (such as the substantially unmixed and the completely mixed solutions described at col. 9, lines 16-35) prior to delivery to the first and second locations,

wherein the organic material becomes free of the compressed fluid solvent prior to reaching the substrate (col. 10, lines 10-30).

'327 does not explicitly teach that the EL material is deposited on a first addressing electrode on the substrate and covered with a second addressing electrode on the EL material. However, the selection of something based on its known suitability for its intended use has been

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held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See MPEP 2144.07. '327 does not teach how to make an EL device. The Examiner takes Official Notice that EL devices are typically constructed by depositing a first addressing electrode on a substrate, depositing the EL material on the first electrode, and depositing a second addressing electrode on the EL material. For instance, '050 teaches that organic EL devices may be constructed by depositing a first addressing electrode (801, 802, 803) on a substrate, depositing the EL material (806, 807, 808) on the addressing electrode and depositing a second electrode (813) on the EL material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the EL device of '327 by depositing a first addressing electrode on a substrate, depositing its EL material on the first electrode, and depositing a second addressing electrode on the EL material with a reasonable expectation of success because '050 teaches that such is a suitable method of making an EL device.

Claims 2-7 and 19-21: The first and second conditions must have temperatures and pressures. Likewise, the evaporation must occur at a temperature and pressure.

Claim 8: The organic material may be printed in at least three distinct locations (Fig. 3D). Furthermore, a color screen comprises thousands of pixels of each color in distinct locations. The mixing process is not instant and therefore must inherently progress through an intermediate (third condition).

Claims 9 and 11: '050 teaches that a mask (825) may be positioned over the electrode prior to deposition (Fig. 4).

Claim 15-16, 37, 39-41: '050 also teaches that different organic EL materials may be deposited [0076-0078] to form a color EL device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have repeated the method of '327 to form each of the three EL layers with a reasonable expectation of success because '327 teaches that its method is suitable for depositing EL materials.

Claims 17-18: Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have mixed each material by the procedure of col. 9, lines 16-35 (i.e., varying the condition of each mixture before depositing it).

Claim 36: The material of '327 is nanomorphous (col. 10, lines 3-5).

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Tuesday-Friday and alternate Mon, 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Cleveland  
Patent Examiner  
September 2, 2004